

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
AUSTIN DIVISION

DOCUMENT MANAGEMENT SYSTEMS  
LLC,

Plaintiff,

v.

ELSEVIER B.V.;  
GOOGLE INC.;  
IAC/INTERACTIVECORP;  
LEXISNEXIS;  
LYCOS INC.;  
WEBMD, LLC;  
YAHOO! INC.;

Defendants.

C.A. No: 1:11-cv-332-SS

JURY TRIAL DEMANDED

**PLAINTIFF'S POST MARKMAN REPLY CLAIM CONSTRUCTION BRIEF**

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To the Honorable Court:

Plaintiff Document Management Systems LLC (“DMS”) hereby files its Post Markman Reply Claim Construction Brief in support of its proposed construction of disputed claim terms in the patent at issue in this case, U.S. Patent No. 6,534,051 (“the ‘051 patent”). This Brief addresses issues related to claim construction as discussed in Defendants’ Supplemental Claim Construction Brief filed July 26, 2012, Document No. 119, as well as issues raised during the *Markman* hearing held in Austin on June 11, 2012.

## I. APPLICABLE LAW

### A. Indefiniteness

In summary: The bar is not set high for definiteness. Claims for which a reasonable construction is available are not invalid for indefiniteness. The requirement that the specification contain structure linked to claimed means does not reset the height of the bar.

Claims should be construed, if possible, so as to sustain their validity. *Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999).

While the specification must contain structure linked to claimed means, **this is not a high bar**: “[a]ll one needs to do in order to obtain the benefit of [§ 112, ¶ 6] is to *recite some structure corresponding to the means in the specification*, as the statute states, so that one can readily ascertain what the claim means and comply with the particularity requirement of [§ 112,] ¶ 2.” *Atmel*, 198 F.3d at 1382. Additionally, interpretation of what is disclosed in the specification must be made in light of the knowledge of one skilled in the art. *Id.* at 1380. Thus, in order for a means-plus-function claim to be valid under § 112, the corresponding structure of the limitation “must be disclosed in the written description in such a manner that one skilled in the art will know and understand what structure corresponds to the means limitation. Otherwise, one does not know what the claim means.” *Id.* at 1382.

*Biomedino, LLC, v. Waters Technologies Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007).

The specific test for indefiniteness is whether a person of skill in the art would understand the bounds of a claim read in view of the specification. “If one skilled in the art

would understand the bounds of the claim when read in light of the specification, then the claim satisfies section 112 paragraph 2.” *Exxon Research v. U.S.*, 265 F.3d 1371, 1375 (Fed. Cir. 2001), citing *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875 (Fed. Cir. 1993).

Here is a concise summary of the law of indefiniteness that demonstrates the high burden on the Defendants to show that the present claims are invalid as a matter of law, from the last paragraph on page 1347 of *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342 (Fed. Cir. 2005) (emphasis added):

The definiteness requirement, however, does ***not compel absolute clarity***. Only claims "not amenable to construction" or "insolubly ambiguous" are indefinite. See *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1353 (Fed.Cir.2003); *Honeywell Int'l*, 341 F.3d at 1338; *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed.Cir.2001). Thus, the definiteness of claim terms depends on whether those terms can be given ***any reasonable meaning***. Furthermore, a difficult issue of claim construction does not ipso facto result in a holding of indefiniteness. *Exxon Research & Eng'g*, 265 F.3d at 1375. ***"If the meaning of the claim is discernible***, even though the task may be formidable and ***the conclusion may be one over which reasonable persons will disagree***, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Id.* In this regard it is important to note that an issued patent is entitled to a statutory presumption of validity. See 35 U.S.C. § 282 (2000). ***"By finding claims indefinite only if reasonable efforts at claim construction prove futile***, we accord respect to the statutory presumption of validity and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal." *Exxon Research & Eng'g*, 265 F.3d at 1375 (citation omitted). In this way we also follow the requirement that ***clear and convincing evidence*** be shown to invalidate a patent. See *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1376 (Fed. Cir.2001).

## **B. The Special Master's Questions**

The Defendants in their Supplemental Claim Construction Brief, Docket No. 119, called our four specific questions from Special Master Bayer. DMS agrees generally with the answers posed by the Defendants, corresponding structure is linked to the function recited in a claim, there can be multiple corresponding structures for a function, algorithm requires no particular form, and so on. DMS does note, however, that the Defendants description of "corresponding"

at pages 1-2 is formed generally again to imply that the linkage requirement sets a high bar for definiteness, which it does not. If a description of structure is clearly describing a claimed function, as, for example, the specification of the '051 patent describes storing at 10:1-16, using terms such as "is loaded," "during loading," "at the time of loading," and "may be stored," then that is sufficiently clear linkage for definiteness under 35 U.S.C. § 112.

And of course DMS cannot agree with the Defendants' conclusion at the top of page 4 in their Supplement Brief that three of the means-plus-function claims in this case lack supportive algorithmic structure. The algorithmic structure required to support means-plus-function claims is not some mysterious, esoteric, impossible-to-find thing. "Algorithm" is a broad term; it easily includes prose descriptions of processing steps carried out by a computer. See *Typhoon Touch Technologies Inc. v. Dell Inc.*, 659 F.3d 1376, 1384-85 (Fed. Cir. 2011). Given the 'wall of words' describing algorithmic structure in the specification of the '051 patent, it would seem that the Defendants again set the bar too high.

Pages 134-135 in the *Markman* transcript show three additional questions from the Special Master: Shown lines 15-23 on page 134, Mr. Bayer asked about relying on words to remove claim construction even "one step from the words that actually get used in the spec..." Mr. Bayer was apparently referring to Tipton Cole's bullet points in which he paraphrased portions of the specification in an effort to evidence how a person of skill in the art would understand it. DMS submits that DMS's proposed constructions for its means-plus-function terms are now based on the wording of the specification.

Shown at the top of page 135, Mr. Bayer asked about selecting structure for claim construction from different locations in the specification to develop a structure that is "not located in any one place in the patent spec but that's limited to the words of the specification." DMS now takes its proposed constructions from one point in the specification, arguing that this procedure is acceptable because most of the algorithmic structure at other locations should be viewed as redundant or repetitive.

Shown at lines 11-21 on page 135, Mr. Bayer asked about using in claim construction pictures not in the patent, apparently referring to three flow charts that Tipton Cole presented to illustrate algorithmic content in the '051 patent. DMS's currently recommended constructions do not include such pictures.

## **II. CONSTRUCTION OF DISPUTED CLAIM TERMS**

### **A. “means for searching”**

DMS agrees with the Defendants that the structure corresponding to “means for searching” is a general purpose computer searching at least a [substantial] portion of the entire domain using Boolean search engine techniques. This expression of the construction of “means for searching” brackets for brevity the term “substantial,” because Claims 12, 14, and 22 recite ‘substantial,’ while claim 10 does not. Neither construction, with or without “substantial,” is indefinite.

### **B. “means for storing”**

The text analysis process accomplished by automated coding is a known algorithm that renders “means for storing” definite according to the exact same analysis that the Defendants used on “means for searching.” The reason that the Defendants now agree that there is algorithmic support for “means for searching” is reflected in the first line of the second paragraph near the top of page 6 of their Supplemental Brief, Docket 119, “In some cases, algorithmic structure may be disclosed by referencing known software...” In particular, the Defendants are referring to a rule that is clarified by a couple of cases, that a reference in a specification to a known algorithm is sufficient algorithmic structure for definiteness if the

reference advises a person of skill in the art of the bounds of the pertinent claim. *Med. Instr. and Diagnosis v. Elekta*, 344 F.3d 1205, 1217-18 (Fed. Cir. 2003); *In re Dossel*, 115 F.3d 942, 946 (Fed. Cir. 1997). The Defendants conclude that that rule means that the references in the specification of the '051 patent to Boolean, vector, and probabilistic searching, referring as they do to search algorithms known to those of skill in the art, are entirely sufficient to render definite “means for searching.” It is noteworthy that, while “Boolean” is discussed at several places, the terms “vector” and “probabilistic” each appears only *once* in the specification of the '051 patent, although that is sufficient according to *In re Dossel* to render “means for searching” definite under 35 U.S.C. § 112.

And the four-step algorithm submitted in DMS's Post-Markman Opening Brief, Docket 118, as structure for construction of “means for storing” is definite for exactly the same reasons – its identifying and coding step refers to known algorithms:

- obtaining documents in electronic form, including converting from hard copy as needed;
- identifying and coding documents by document type;
- loading documents in electronic form into an appropriate search engine; and
- identifying redundant documents by matching information associated with a document such as key words in the title, authors, and date of publication.

The second step in this four-step algorithm, identifying and coding documents by document type, is the target of the Defendants attack, beginning on page 5 of their Supplemental Brief, that “‘means for storing’ relies on the insufficiently disclosed document typing process.” That is, what the Defendants refer to as the “document typing process” is the second step in the four-step algorithm. The “document typing process,” however is not insufficiently disclosed



because it is a reference to a well known algorithm. The exact reference is the phrase “text analysis process” at column 9, line 14, in the ‘051 patent. The known algorithms so referenced, according to Dr. Larson, are natural language processing or “NLP” algorithms. At page 113 of the Markman transcript, Mr. Zembek questions Dr. Larson:

Q. Is that what you referred to before as the – I think you called the NLP problem?

A. Yeah. This is one of those things where you have to be able to read conference proceedings and various publications, newspapers, and so on, and figure out what the types of each are.

Q. How good are computers that do any document typing today?

A. Not very good. ...

Dr. Larson is able to criticize NLP algorithms because they are well known to him and to others of skill in the art, and have been since the 1950s:

The history of NLP generally starts in the 1950s...

Some notably successful NLP systems developed in the 1960s...

During the 70's many programmers began to write 'conceptual ontologies'...

Up to the 1980s, most NLP systems were based on complex sets of hand-written rules. Starting in the late 1980s, however, there was a revolution in NLP with the introduction of machine learning algorithms for language processing. ...

*Natural Language Processing*, [www.wikipedia.org/wiki/Natural\\_language\\_processing](http://www.wikipedia.org/wiki/Natural_language_processing) (last visited August 2012). Dr. Larson might not think very highly of NLP algorithms, but he knows exactly what they are. So “text analysis process” referring to NLP algorithms is all that is needed to advise a person of skill in the art of the bounds of “means for storing” and render “means for storing” definite under 35 U.S.C. § 112.

**C. “document” / “source record”**

DMS now proposes for the first time these constructions:

“source record” (claims 1, 10, 14, 18, 22)	“collection of searchable data”
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“document” (claims 1, 10, 14, 18, 22)	“searchable data, including text as well as non-text”
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These constructions adopt Mr. Bayer’s recommendation regarding “searchable data,” and move to the same construction now recommended by the Defendants with the single exception that source records and documents are not limited only to text.

DMS maintains its position that documents include text as well as non-text as previously briefed in detail and argued at Markman – although DMS does add this factor for the Court’s consideration: The Defendants’ own expert’s patent application supports DMS’ construction. Here is how Dr. Larson’s patent application publication, U.S. No. 2006/0277170, Plaintiff’s Markman Exhibit 1, this paper’s Exhibit A, describes “document” at its paragraphs 52-53:

[0052] A DocumentGroup 10 represents a collection of one or more digital objects. The format and content of these, and their origin, can be very diverse. They may be textual, numeric, image, video, audio or other types of data. ...

[0053] A Document 12 represents a single digital object in any format. ...

**D. “a portion,” “a substantial portion,” “substantially all”**

“As this court has frequently stated, the presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim. ... In such a setting, where the limitation that is sought to be “read into” an independent claim already appears in a dependent claim, the doctrine of claim differentiation is

at its strongest.” *Liebel-Flarsheim Company v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004). [T]his presumption can be overcome only where a contrary construction is “dictated”—i.e., compelled—by the written description or prosecution history. *Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369, 1370–72 (Fed.Cir.2005).

Here the presumption is at its strongest. Claim 21 depends from claim 18, adding the limitation “substantially all of the data” to the scope of claim 18 which recites only “at least a portion.” Claims 10 and 17 also recite searching “at least a portion” of the data. Claims 1, 14, and 22 recite searching “at least a substantial portion” of the data.

The fact that both sides used the term “wiggle words” to describe the equivocal descriptions in the so-called disclaimers in the intrinsic record *means* that the descriptions are equivocal. Even if the definition of “unequivocal” means “is not suitable to multiple interpretations,” DMS has identified alternative meaning, that is, that searching substantially all of the data according to embodiments of the present invention now for the first time makes sense to do in searching, is desirable and functional, *not* that it is required.

#### **E. Remaining Terms**

DMS’s case regarding the remaining disputed claim terms is already fully briefed and correctly presented at the *Markman* hearing. DMS’s proposed constructions of those terms are correct for the reasons expressed in its previous briefs and at the *Markman* hearing.

Respectfully submitted,

Date: August 9, 2012

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**CERTIFICATE OF SERVICE**

The undersigned certifies that on August 9, 2012, the foregoing document was filed electronically in compliance with Local Rule CV-5(a). The document was served on all counsel of record who are deemed to have consented to electronic service. Local Rule CV-5(b)(1). Pursuant to Federal Rule of Civil Procedure 5(d) and Local Rule CV-5, all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of this pleading by first class mail.

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